

Serial No. 09/802,678
November 24, 2004
Reply to the Office Action dated August 25, 2004
Page 2 of 21

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-8 (canceled).

Claim 9 (currently amended): A leadless plastic chip carrier, comprising:
a semiconductor die mounted to a ground plane;
at least one row of contact pads circumscribing said ground plane;
a power/ground ring intermediate said at least one row of contact pads and said ground plane;
a plurality of wire bonds connecting various ones of said semiconductor die, said power/ground ring and said row of contact pads; and
an overmold covering said semiconductor die ~~and all except one exposed surface of~~ said wire bonds, said at least one row of contact pads and said ground plane, such that at least one surface of said at least one row of contact pads and at least one surface of said ground plane are exposed.

Claim 10 (original): The leadless plastic chip carrier of claim 9, wherein said at least one row of contact pads comprises a plurality of metal layers deposited to form a rivet shape in profile.

Claim 11 (original): The leadless plastic chip carrier of claim 9, wherein said at least one row of contact pads is round.

Claim 12 (original): The leadless plastic chip carrier of claim 9, wherein said at least one row of contact pads is rectangular.

Serial No. 09/802,678
November 24, 2004
Reply to the Office Action dated August 25, 2004
Page 3 of 21

Claim 13 (original): The leadless plastic chip carrier of claim 9, wherein said at least one row of contact pads is recessed into said overmold to form a plurality of etch down cavities.

Claim 14 (original): The leadless plastic chip carrier of claim 13, further including a plurality of solder balls within said etch down cavities and connected to said at least one row of contact pads.

Claim 15 (currently amended): The leadless plastic chip carrier of claim 49, wherein an outer edge of said ground plane conforms to an interlock pattern.

Claim 16 (original): The leadless plastic chip carrier of claim 10, wherein said plurality of metal layers comprises successive layers of Au, Ni, Cu, Ni and Au.

Claim 17 (original): The leadless plastic chip carrier of claim 10, wherein said plurality of metal layers comprises successive layers of Au, Ni, Cu, and Ag.

Claim 18 (original): The leadless plastic chip carrier of claim 10, wherein said plurality of metal layers comprises successive layers of Tin, Cu, Ni and Au.

Claim 19 (original): The leadless plastic chip carrier of claim 10, wherein said plurality of metal layers comprises successive layers of Tin, Cu, and Ag.

Claim 20 (canceled).

Claim 21 (new): The leadless plastic chip carrier of claim 10, wherein the at least one surface of said row of contact pads and the at least one surface of said ground plane that are exposed are coated with a thin uniform layer of solder.